



## DUPLEX TANK MOUNTED LIQUID RING MEDICAL VACUUM SYSTEMS 1.5 THROUGH 7.5 HP

The Amico "ECONOMIZER V" continuous duty tank mounted Medical Vacuum system is a completely packaged NFPA 99 and NEC compliant assembly featuring liquid ring vacuum pumps, a U.L. listed electrical control cabinet, an ASME receiver and the necessary accessories required to meet and exceed the current code requirements. All components are pre-piped and pre-wired to single-point service connections. The only field connections are air intake, air discharge, seal water supply, drain and power connection at the control panel. All interconnecting piping as well as wiring is completed and operationally tested prior to shipment. Liquid tight conduit, fittings and junction boxes are provided for all control and power wiring.

**The system includes a field selectable and adjustable amount of partial water recirculation up to 95% without the use of heat exchangers and chilled water.** The medical vacuum pumps are of the positive displacement, non-pulsating, liquid ring design capable of passing fluids and soft solids directly to waste without damage. The standard construction is cast iron with bronze impeller, stainless steel shaft and mechanical seals.

Each vacuum pump is driven by a 3 phase, 60 cycle, ODP NEMA design B motor.

The system includes a vacuum storage tank of ASME construction rated for full vacuum service. The tank is equipped with a vacuum gauge, valved by-pass and manual tank drain.

Also included as standard equipment for each vacuum pump are: inlet check valve, inlet isolation valve, discharge separator-silencer, vacuum control switch, and a seal water line consisting of isolation valve, Y-strainer, solenoid valve with manual priming valve, back-flow preventer and flow control valve. Bronze or stainless steel flexible connectors on inlet, discharge and seal water supply lines as well as copper tubing with shut-off cock for gauge and vacuum switches are also part of the package.

The system includes a UL labeled control panel in a NEMA 12 enclosure. The panel includes the following standard accessories for **each** pump: externally operable circuit breaker with a door interlock, control circuit transformer with fused primary and secondary coils, H-O-A switch, run light, magnetic starter with 3 leg overload protection and reset switch. The panel is equipped with a multiple position selector switch for selection of normal operation (automatic alternation) or manual selection of lead and lag pumps if one of the pumps is taken out of service due to scheduled maintenance.

Local "Reserve in use" audible and visual alarms are provided per NFPA 99. The alarm includes an indicating light as well as the horn. The audible alarm can be



acknowledged with the "Silence" button. The visual alarm will remain energized until the problem has been corrected. Each alarm function includes a set of dry contacts for connection to the master alarm. All control and alarm functions will remain energized while any vacuum pump in the system remains electrically on-line. Field adjustable control switches are pre-set to operate the lead vacuum pump between 19" Hg and 24" Hg. The lag vacuum pump will automatically start at 18" Hg if the lead vacuum pump fails to operate.

The Medical Vacuum system and its component parts will undergo a complete electric and pneumatic test prior to shipment.

The Medical Vacuum system is guaranteed by the manufacturer for a period of 18 months from the date of start-up or 24 months from the date of shipment (whichever comes first) against defects in design, materials, or construction.

### Optional System Accessories

(only checked options will be supplied)

- Rust protection receiver lining
- Galvanized receiver
- Seal water shock arresters
- Vacuum relief valve
- Receiver gauge glass
- Interface to AIMS (AMICO Information Management System)